

Rabbit PLCG2 Polyclonal Antibody | anti-PLCG2 antibody

PLCG2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326660	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PLCG2; Polyclonal Antibody; PLCG2 Antibody; 1 phosphatidylinositol 4 5 biphosphate phosphodiesterase gamma 2; 1-phosphatidylinositol-4; 5-bisphosphate phosphodiesterase gamma-2; EC 3.1.4.11; Phosphoinositide phospholipase C; Phosphoinositide phospholipase C-gamma-2; Phospholipase C gamma 2; Phospholipase C; gamma 2 (phosphatidylinositol specific); Phospholipase C-gamma-2; Phospholipase C-IV; PLC 2; PLC gamma 2; PLC IV; PLC-gamma-2; PLC-IV; Plcg2; PLCG2_HUMAN; anti-PLCG2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PLCG2 antibody detects endogenous levels of total PLCG2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1265
Applicable Applications for anti-PLCG2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PLCG2
Subcellular Location	Cytoplasmic and Plasma Membrane
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA326660 staining HepG2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of Hela whole cell lysates, using PLCG2 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326660 at 1/100 staining Human prostate tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-PLCG2 antibody	Description: Phosphoinositide-specific phospholipase C (PLC) plays a significant role in transmembrane signaling. In response to extracellular stimuli such as hormones, growth factors and neurotransmitters, PLC hydrolyzes phosphatidylinositol 4, 5-bisphosphate (PIP2) to generate two secondary messengers: inositol 1, 4, 5-triphosphate (IP3) and diacylglycerol (DAG) (1). At least four families of PLCs have been identified: PLCbeta, PLCgamma, PLCdelta and PLCepsilon. The PLCbeta subfamily includes four members, PLCbeta1-4. All four members of the subfamily are activated by alpha-or beta-gamma-subunits of the heterotrimeric G-proteins (2, 3).Phosphorylation is one of the key mechanisms that regulates the activity of PLC. Phosphorylation of Ser1105 by PKA or PKC inhibits PLCbeta3 activity (4, 5). Ser537 of PLCbeta3 is phosphorylated by CaMKII, and this phosphorylation may contribute to the basal activity of PLCbeta3. PLCgamma is activated by both receptor and nonreceptor tyrosine kinases (6).PLCgamma forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLCgamma at Tyr771, 783 and 1245 (7). Phosphorylation by Syk at Tyr783 activates the enzymatic activity of PLCgamma1 (8). PLCgamma2 is engaged in antigen-dependent signaling in B cells and collagen-dependent signaling in platelets. Function: The production of the second messenger molecules diacylglycerol (DAG) and inositol 1, 4, 5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes. It is a crucial enzyme in transmembrane signaling. Subunit Structure: Interacts (via SH2 domain) with CSF1R (tyrosine phosphorylated). Post-translational Modifications: Phosphorylated on tyrosine residues by CSF1R (By similarity). Phosphorylated on tyrosine residues by BTK and SYK; upon ligand-induced activation of a variety of growth factor receptors and immune system receptors. Phosphorylation leads to increased phospholipase activity.
---	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	117320537
NCBI GeneID	5336
NCBI Accession #	NP_002652.2
NCBI GenBank Nucleotide #	NM_002661.4
UniProt Accession #	P16885; Q3ZTS2; Q59H45; Q969T5; D3DUL3
Molecular Weight	Observed: 150 kDa Predicted: 148 kDa
NCBI Official Full Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2
NCBI Official Synonym Full Names	phospholipase C gamma 2
NCBI Official Symbol	PLCG2
NCBI Official Synonym Symbols	FCAS3; APLAID; PLC-IV; PLC-gamma-2
NCBI Protein Information	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2
UniProt Protein Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2
UniProt Gene Name	PLCG2
UniProt Synonym Gene Names	PLC-IV; PLC-gamma-2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/plcg2-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326660>